

Amendments to the Claims:

1-27. (canceled)

28. (currently amended) An isolated nucleic acid encoding a polypeptide having at least 80% ~~nucleic acid~~ sequence identity to:

(a) ~~a nucleic acid sequence encoding the amino acid sequence of the polypeptide of~~ SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);

(b) ~~a nucleic acid sequence encoding the amino acid sequence of the polypeptide of~~ SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

(c) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide~~ shown in Figure 66 (SEQ ID NO:116);

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide~~ shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

(e) ~~the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);~~

[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or

[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

29. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 85% ~~nucleic acid~~ sequence identity to:

(a) ~~a nucleic acid sequence encoding the amino acid sequence of the polypeptide of~~ SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);

(b) ~~a nucleic acid sequence encoding the amino acid sequence of the polypeptide of~~ SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

(c) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide~~ shown in Figure 66 (SEQ ID NO:116);

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide~~

~~shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;~~

~~[(e)] the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);~~

~~[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or~~

~~[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.~~

30. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 90% ~~nucleic acid~~ sequence identity to:

(a) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);

(b) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

~~(e) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);~~

~~(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;~~

~~[(e)] the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);~~

~~[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or~~

~~[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.~~

31. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 95% ~~nucleic acid~~ sequence identity to:

(a) ~~a nucleic acid sequence encoding the~~ amino acid sequence of the polypeptide of

SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);

(b) ~~a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;~~

(e) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);~~

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;~~

(e) ~~the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);~~

[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or

[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

32. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 99% ~~nucleic acid~~ sequence identity to:

(a) ~~a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);~~

(b) ~~a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;~~

(e) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);~~

(d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;~~

(e) ~~the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);~~

[[f]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or

[[g]] (e) the amino acid sequence of the polypeptide encoded by the full-length

coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

33. (currently amended) An isolated nucleic acid comprising:
- (a) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116)
 - (b) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
 - (c) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);~~
 - (d) ~~a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;~~
 - [[(e)] (d) the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115);
 - [[(f)] (e) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or
 - [[(g)] (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203278.

34. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116).

35. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide.

36. (canceled)

37. (canceled)

38. (currently amended) The isolated nucleic acid of Claim 33 comprising the nucleic

acid sequence of SEQ ID NO:115 shown in Figure 65 (~~SEQ ID NO:115~~).

39. (currently amended) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (~~SEQ ID NO:115~~).

40. (previously presented) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 203278.

41. (canceled)

42. (canceled)

43. (canceled)

44. (previously presented) A vector comprising the nucleic acid of Claim 28.

45. (previously presented) The vector of Claim 44, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.

46. (previously presented) A host cell comprising the vector of Claim 44.

47. (previously presented) The host cell of Claim 46, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.